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=> s zinc finger

L1 31152 ZINC FINGER

=> s nucleic acid binding protein

3 FILES SEARCHED...

L2 2059 NUCLEIC ACID BINDING PROTEIN

=> s 12 and method

L3 608 L2 AND METHOD

=> s 13 and production

L4 256 L3 AND PRODUCTION

=> s 14 and 11

L5 56 L4 AND L1

=> d 15 ti abs ibib 1-10

L5 ANSWER 1 OF 56 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by

iterative selection and recombination

AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method**

for the production of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also sates to a **method** of repeated codes of mutagenesis, shurfling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:81277 USPATFULL

TITLE:

Methods for generating polynucleotides having desired

characteristics by iterative selection and

recombination

INVENTOR(S):

Stemmer, Willem P. C., Los Gatos, CA, United States Maxygen, Inc., Redwood City, CA, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

PATENT ASSIGNEE(S):

US 6372497 B1 20020416 US 2000-590774 20000608 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1996-621859, filed on 25

Mar 1996, now patented, Pat. No. US 6117679

Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995, now patented, Pat. No. US 5811238 Continuation-in-part of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now

patented, Pat. No. US 5605793

DOCUMENT TYPE:

Utility

FILE SEGMENT:

GRANTED

PRIMARY EXAMINER:

Whisenant, Ethan

LEGAL REPRESENTATIVE: Kruse, Norman J., Quine, Jonathan Alan, The Law

Offices

of Jonathan Alan Quine

NUMBER OF CLAIMS:

37 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

72 Drawing Figure(s); 37 Drawing Page(s)

LINE COUNT:

6311

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 2 OF 56 USPATFULL

ΤI Methods of evolving a polynucleotides by mutagenesis and recombination

AB A method of mutating a polynucleotide such that it has a desired or improved functional property is disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:69827 USPATFULL

TITLE:

Methods of evolving a polynucleotides by mutagenesis

and recombination

INVENTOR(S):

Stemmer, Willem P. C., Los Gatos, CA, United States Maxygen, Inc., Redwood City, CA, United States (U.S.

corporation)

NUMBER KIND DATE ______

PATENT INFORMATION:

PATENT ASSIGNEE(S):

APPLICATION INFO.:

US 6365408 B1 20020402 US 2000-477763 20000104 20000104 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1998-100856, filed on 19

Jun 1998, now patented, Pat. No. US 6132970

Continuation of Ser. No. US 537874, now patented, Pat.

No. US 5830721

DOCUMENT TYPE: FILE SEGMENT:

Utility GRANTED

PRIMARY EXAMINER:

Whisenant, Ethan

LEGAL REPRESENTATIVE: Kruse, Norman, Liebeschuetz, Joe

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: Drawing Figure(s); 15 Drawing age(s)

LINE COUNT:

4167

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5ANSWER 3 OF 56 USPATFULL

ΤI Exonuclease-mediated nucleic acid reassembly in directed evolution AΒ This invention provides methods of obtaining novel polynucleotides and encoded polypeptides by the use of non-stochastic methods of directed evolution (DirectEvolution.TM.). A particular advantage of exonuclease-mediated reassembly methods is the ability to reassemble nucleic acid strands that would otherwise be problematic to chimerize. Exonuclease-mediated reassembly methods can be used in combination with other mutagenesis methods provided herein. These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide

reassembly (GeneReassembly.TM.). This invention provides methods of obtaining novel

enzymes that have optimized physical &/or biological properties. Through

use of the claimed methods, genetic vaccines, enzymes, small molecules, and other desirable molecules can be evolved towards desirable properties. For example, vaccine vectors can be obtained that exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 2002:63712 USPATFULL ACCESSION NUMBER:

TITLE: Exonuclease-mediated nucleic acid reassembly in

directed evolution

INVENTOR (S): Short, Jay M., Rancho Santa Fe, CA, United States

Djavakhishvili, Tsotne David, San Diego, CA, United

States

Frey, Gerhard Johann, San Diego, CA, United States Diversa Corporation, San Diego, CA, United States

KIND DATE

PATENT ASSIGNEE(S):

(U.S.

corporation)

NUMBER

-----PATENT INFORMATION: US 6361974 B1 20020326 APPLICATION INFO.: US 2000-535754 20000327 (9) Continuation-in-part of Ser. No. US 2000-522289, filed RELATED APPLN. INFO.: on 9 Mar 2000 Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000 Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000 Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999 Continuation-in-part of Ser. No. US

1999-276860, filed on 26 Mar 1999 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented,

Pat. No. US 5830696 Continuation-in-part of Ser. No.

1997-962504, filed on 31 Oct 1997, now patented, Pat.

No. US 6029056 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996 now patented, Pat. o. US 5965408 Continuation-in-pat of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat.

No. US 5939250

NUMBER DATE _____

PRIORITY INFORMATION:

US 1995-8311P 19951207 (60) US 1995-8316P 19951207 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility GRANTED

PRIMARY EXAMINER:

Park, Hankyel T.

LEGAL REPRESENTATIVE:

Gray Cary Ware & Freidenrich, Haile, Lisa A., Shen,

Grea

NUMBER OF CLAIMS:

15

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

6 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT:

7313

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 4 OF 56 USPATFULL L5

End selection in directed evolution TΙ

This invention provides methods of obtaining novel polynucleotides and AΒ encoded polypeptides by the use of non-stochastic methods of directed evolution (DirectEvolution.TM.). A particular advantage of end-selection-based methods is the ability to recover full-length polynucleotides from a library of progeny molecules generated by mutagenesis methods. These methods include non-stochastic

polynucleotide

site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). This invention provides methods of obtaining novel enzymes that have optimized physical &/or biological properties. Through use of the claimed methods, genetic vaccines, enzymes, small molecules, and other desirable molecules can be evolved towards desirable properties. For example, vaccine vectors can be obtained that exhibit increased

efficacy

for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:57570 USPATFULL

TITLE:

End selection in directed evolution

INVENTOR(S):

Short, Jay M., Encinitas, CA, United States

Frey, Gerhard Johann, San Diego, CA, United States

PATENT ASSIGNEE(S):

Diversa Corporation, San Diego, CA, United States

(U.S.

corporation)

	NUMBER	KIND	DATE	
US	6358709	B1	20020319	
US	2000-522289		20000309	(

PATENT INFORMATION: APPLICATION INFO.:

(9)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000 Continuation-in-part of Ser. No. US 2000-495052, filed on 13 Jan 2000 Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999, now abandoned Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999 Continuation-in-part

of Ser. No. US 1999-267118, filed on 9 Mar 1999, now patented, Pat. No. US 6238884 Continuation-in-part of er. No. US 1999-246178, filed 4 Feb 1999, now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation of Ser. No. US 1996-760489, filed on 5

Dec

1996, now patented, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408 Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250

NUMBER DATE -----

PRIORITY INFORMATION:

US 1995-8311P 19951207 (60) US 1995-8316P 19951207 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility GRANTED

FILE SEGMENT: GRANTED PRIMARY EXAMINER: Park, Hankyel T.

LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

11 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 7029

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5ANSWER 5 OF 56 USPATFULL

ΤI Human single nucleotide polymorphisms

The invention provides nucleic acid segments of the human genome, AΒ particularly nucleic acid segments from genes including polymorphic sites. Allele-specific primers and probes hybridizing to regions flanking or containing these sites are also provided. The nucleic

acids,

primers and probes are used in applications such as phenotype correlations, forensics, paternity testing, medicine and genetic analysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:55155 USPATFULL

TITLE:

Human single nucleotide polymorphisms

INVENTOR(S):

Cargill, Michele, Gaithersburg, MD, UNITED STATES

Ireland, James S., Gaithersburg, MD, UNITED STATES

Lander, Eric S., Cambridge, MA, UNITED STATES Whitehead Institute for Biomedical Research,

PATENT ASSIGNEE(S): Cambridge,

MA, UNITED STATES (U.S. corporation)

KIND DATE NUMBER _______ PATENT INFORMATION: US 2002032319 A1 20020314 US 2001-801274 A1 20010307 (9) APPLICATION INFO.:

> NUMBER DATE -----

PRIORITY INFORMATION:

US 2000-187510P 20000307 (60) US 2000-206129P 20000522 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: HAMILTON BROOK SMITH AND REYNOLDS, P.C., TWO MILITIA

DR, LEXINGTON, MA, 02421-4799

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: 1
LINE COUNT: 8981
CAS INDEXING IS AVAILATED FOR THIS PATENT.

L5 ANSWER 6 OF 56 USPATFULL

TI METHOD OF DNA SHUFFLING WITH POLYNUCLEOTIDES PRODUCED BY BLOCKING OR INTERRUPTING A SYNTHESIS OR AMPLIFICATION PROCESS

AB Disclosed is a process of performing "Sexual" PCR which includes generating random polynucleotides by interrupting or blocking a synthesis or amplification process to show or halt synthesis or amplification of at least one polynucleotide, optionally amplifying the polynucleotides, and reannealing the polynucleotides to produce random mutant polynucleotides. Also provided are vector and expression

vehicles

including such mutant polynucleotides, polypeptides expressed by the mutant polynucleotides and a **method** for producing random mutant polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:48252 USPATFULL

TITLE: METHOD OF DNA SHUFFLING WITH POLYNUCLEOTIDES

PRODUCED BY BLOCKING OR INTERRUPTING A SYNTHESIS OR

AMPLIFICATION PROCESS

INVENTOR(S): SHORT, JAY M., ENCINITAS, CA, UNITED STATES

NUMBER KIND DATE ------US 2002028443 A1 20020307 US 1999-214645 A1 19990927 PATENT INFORMATION: APPLICATION INFO.: (9) WO 1997-US12239 19970709 DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: LISA A. HAILE PH.D., GRAY CARY WARE & FREIDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1600, SAN DIEGO, CA, 92121 NUMBER OF CLAIMS: EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 6 Drawing Page(s) LINE COUNT: 2551

L5 ANSWER 7 OF 56 USPATFULL

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Exonucease-mediated gene assembly in directed evolution

AB A directed evolution process comprising novel methods for generating improved progeny molecules having desirable properties, including, for example, a method for rapid and facilitated production from a parental polynucleotide template, of a set of mutagenized

polynucleotides wherein at least one codon encoding each of the 20 naturally encoded amino acids is represented at each original codon position. This method, termed site-saturation mutagenesis, or simply saturation mutagenesis, is preferably based on the use of the degenerate N,N,G/T sequence. Also, a method of producing from a parental polypeptide template, a set of mutagenized progeny polypeptides wherein each of the 20 naturally encoded amino acids is represented at each original amino acid position. Also, other mutagenization processes that can be used in combination with, or in lieu of, saturation mutagenesis, including, for example: (a) assembly and/or reassembly of polynucloetide building blocks (including sections of genes &/or of gene families) mediated by a source of exonuclease activity such as exonuclease III; and (b) introduction of two or more related polynucleotides into a suitable host cell such that a hybrid polynucleotide is generated by recombination and reductive reassortment.

Also molecular property screening methods, including a preferred

method, termed end selection, comprised of using an enzyme, such as a topoisomerage, a restriction endonuclease, &/or a nicking enzyme (such as N. Bst. 1), to detect a specific terminal sequence in a working polynucleotide, to produce a ligatable end thereat, and to ligate and clone the working polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 2002:45482 USPATFULL

TITLE: Exonucease-mediated gene assembly in directed

evolution

INVENTOR(S): Short, Jay M., Encinitas, CA, United States Frey, Gerhard J., San Diego, CA, United States

Djavakhishvili, Tsotne D., San Diego, CA, United

States

PATENT ASSIGNEE(S):

Diversa Corporation, San Diego, CA, United States

(U.S.

corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6352842	В1	20020305	
APPLICATION INFO.:	US 1999-276860		19990326	(9)
RELATED APPLN. INFO.:	Continuation-in-	-part of	Ser. No.	US 1999-267118, filed
	on 9 Mar 1999, r	now pater	nted, Pat.	. No. US 6238884
	Continuation-in-	-part of	Ser. No.	US 1999-246178, filed
	on 4 Feb 1999, r	now pater	nted, Pat	. No. US 6171820
	Continuation-in-	part of	Ser. No.	US 1998-185373, filed
	on 3 Nov 1998 Co	ntinuat	ion of Se	c. No. US 1996-760489,
	filed on 5 Dec 1	.996, not	w patented	d, Pat. No. US 5830696

Continuation—in—part of Ser. No. US 1998—185373, filed on 3 Nov 1998 Continuation of Ser. No. US 1996—760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 Continuation—in—part of Ser. No. US 1997—962504, filed on 31 Oct 1997, now abandoned Continuation—in—part of Ser. No. US 1996—677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408 Continuation—in—part of Ser. No. US 1996—651568, filed on 22 May 1996, now

patented, Pat. No. US 5939250

NUMBER	DATE		

PRIORITY INFORMATION:

US 1995-8311P 19951207 (60) US 1995-8316P 19951207 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Park, Hankyel T.

LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.,

Shen,

Greg

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 4817

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 56 USPATFULL

TI Expressed sequences of arabidopsis thaliana

AB Isolated nucleotide compositions and sequences are provided for Arabidopsis thaliana genes. The nucleic acid compositions find use in identifying homologous or related genes; in producing compositions that modulate the expression or function of its encoded protein, mapping functional regions of the protein; and in studying associated physiological pathways. The genetic sequences may also be used for the genetic manipulation of cells, particularly of plant cells. The encoded gene products and modified organisms are useful for screening of biologically active agents, e.g. fungicides, insecticides, etc.; for elucidating biochemical pathways; and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 002:38558 USPATE

ACCESSION NUMBER:

002:38558 USPATFULL

TITLE:

INVENTOR(S):

Expressed sequences of arabidopsis thaliana Gorlach, Jorn, Durham, NC, UNITED STATES An, Yong-Qiang, San Diego, CA, UNITED STATES Hamilton, Carol M., Apex, NC, UNITED STATES Price, Jennifer L., Raleigh, NC, UNITED STATES Raines, Tracy M., Durham, NC, UNITED STATES Yu, Yang, Martinsville, NJ, UNITED STATES Rameaka, Joshua G., Durham, NC, UNITED STATES

Page, Amy, Durham, NC, UNITED STATES

Mathew, Abraham V., Cary, NC, UNITED STATES

Ledford, Brooke L., Holly Springs, NC, UNITED STATES Woessner, Jeffrey P., Hillsborough, NC, UNITED STATES

Haas, William David, Durham, NC, UNITED STATES Garcia, Carlos A., Carrboro, NC, UNITED STATES Kricker, Maja, Pittsboro, NC, UNITED STATES

Slater, Ted, Apex, NC, UNITED STATES

Davis, Keith R., Durham, NC, UNITED STATES

Allen, Keith, Cary, NC, UNITED STATES

Hoffman, Neil, Chapel Hill, NC, UNITED STATES Hurban, Patrick, Raleigh, NC, UNITED STATES

NUMBER KIND DATE _____ US 2002023280 A1 20020221 US 2001-770444 A1 20010126 (9)

PATENT INFORMATION: APPLICATION INFO.:

> DATE NUMBER

PRIORITY INFORMATION:

US 2000-178502P 20000127 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: PARADIGM GENETICS, INC, 104 ALEXANDER DRIVE, BUILDING

2, P O BOX 14528, RTP, NC, 277094528

27 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 3845 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 9 OF 56 USPATFULL

ITMethods for recombining nucleic acids

A method for DNA reassembly after random fragmentation, and AΒ its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a method for the production of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a method of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:24196 USPATFULL

Methods for recombining nucleic acids TITLE:

INVENTOR(S): Stemmer, Willem P.C., Los Gatos, CA, United States PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S.

corporation)

NUMBER KIND DATE _______ PATENT INFORMATION: US 6344356 B1 20020205 APPLICATION INFO.: US 2000-590778 20000608 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-621859, filed on 25

Mar 1996, now patented, Pat. No. US 6117679 Continuation-in-part of Ser. No. US 1995-564955, filed a 30 Nov 1995, now patented, Part No. US 5811238 Continuation-in-part of Ser. No. US 537874, now

patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now

patented, Pat. No. US 5605793

DOCUMENT TYPE:

Utility GRANTED

FILE SEGMENT: PRIMARY EXAMINER:

Whisenant, Ethan

LEGAL REPRESENTATIVE:

Kruse, Norman J., Quine, Jonathan Alan, Law Ofices of

Jonathan Alan Quine

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

72 Drawing Figure(s); 37 Drawing Page(s)

LINE COUNT:

6408

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 10 OF 56 USPATFULL

ΤI Arrays for identifying agents which mimic or inhibit the activity of interferons

Methods and model systems for identifying and characterizing new AB therapeutic agents, particularly proteins, which mimic or inhibit the activity of all interferons, Type I interferons, IFN-.alpha., IFN-.beta., or IFN-.gamma.. The method comprises administering an interferon selected from the group consisting of IFN-.alpha., IFN .beta., IFN-.tau., IFN-.omega., IFN-.gamma., and combinations thereof

t.o

cultured cells, administering the candidate agent to a duplicate culture

of cells; and measuring the effect of the candidate agent and the interferon on the transcription or translation of one or, preferably, a plurality of the interferon stimulated genes or the interferon repressed

genes (hereinafter referred to as "ISG's" and "IRGs", respectively).

The

model system is an array with gene probes that hybridize with from about

100 to about 5000 ISG and IRG transcripts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2001:231143 USPATFULL

TITLE:

Arrays for identifying agents which mimic or inhibit

the activity of interferons

INVENTOR(S):

Silverman, Robert H., Beachwood, OH, United States Williams, Bryan R. G., Cleveland, OH, United States Der, Sandy, Cleveland, OH, United States

PATENT ASSIGNEE(S):

The Cleveland Clinic Foundation, Cleveland, OH, United

States (U.S. corporation)

NUMBER KIND DATE __________

PATENT INFORMATION: APPLICATION INFO.:

US 6331396 B1 20011218 US 1999-405438 19990923 19990923 (9)

NUMBER DATE ______

PRIORITY INFORMATION:

US 1998-101497P 19980923 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT: GRANTED

Zitomer, Stephanie

PRIMARY EXAMINER: ASSISTANT EXAMINER:

Forman, B J

LEGAL REPRESENTATIVE:

Calfee, Halter & Griswold LLP

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: LINE COUNT: CAS INDEXING IS AVAILAL

1 9639 FOR THIS PATENT.